

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Glenn Cowelchuk et al.

Group Art Unit: 1772

Examiner: William P. Watkins III

Serial No.: 10/821,058

Filed: April 8, 2004

For: TWO-SHOT POLYMERIC COMPONENT WITH
ATTACHMENT FEATURE AND METHOD OF
PRODUCING SAME

Attorney Docket No.: LEAR 04675 PUS

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

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U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief from the final rejection of claims 1-15 of the Office Action mailed 5 July 2006, for the above-identified patent application.

I. REAL PARTY IN INTEREST

The real party in interest is Lear Corporation (“Assignee”), a corporation organized and existing under the laws of the state of Delaware, and having a place of business at 21557 Telegraph Road, Southfield, Michigan 48033, as set forth in the assignment recorded in the U.S. Patent and Trademark Office on 8 April 2004 at Reel 015214/Frame 0192.

II. RELATED APPEALS AND INTERFERENCES

CERTIFICATE OF ELECTRONIC FILING

This paper, including all enclosures referred to herein, is being electronically filed with the U.S. Patent and Trademark Office EFS-Web System on January 18, 2007.

There are no appeals or interferences known to the Appellant, the Appellant's legal representative, or the Assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-20 are pending in this application; claims 1-15 have been rejected and are the subject of this appeal, and claims 16-20 are withdrawn from consideration.

IV. STATUS OF AMENDMENTS

No amendment after final rejection has been filed.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 recites a two-shot injection molded polymeric component. Examples of such components include a vehicle interior trim component 10, illustrated in Figure 2, wrapped around a wiring harness 38. As recited in claim 1, the two-shot component includes a first injection molded portion which includes first and second opposing sides. Referring to the embodiment shown in Figure 2, the first portion 20 of the component 10 has first and second opposing sides 22, 24, respectively. This is described in the specification, for example, in paragraphs 0018 and 0019. Claim 1 further recites that the two-shot component includes a second injection molded portion "formed such that at least some of the second portion is disposed adjacent the first side of the first portion and at least some of the second portion is disposed adjacent the second side of the first portion." This is illustrated in the embodiment in Figure 2 as second portion 28, which is formed such that some of it is disposed adjacent the first side 22 of the first portion 20, and some of it is disposed adjacent the second side 24 of

the first portion 20. The second portion is also described in the specification, for example, in paragraph 0020.

As further recited in claim 1, the second portion includes "an attachment feature integrally molded therewith," and "the attachment feature [is] configured to facilitate attachment of an object to be attached proximate one side of the first portion." Again referencing the embodiment of Figure 2, the attachment feature 32 is integrally molded with the second portion 28. In addition, the attachment feature 32 is shown attaching an object--i.e., a wiring harness 38--proximate one side 24 of the first portion 20. This is described in paragraph 0022 of the specification.

Claim 8 recites a two-shot injection molded automotive interior trim component that includes "a structural portion made from a polymeric material and including a show side and a back side opposite the show side." Again referring to Figure 2, the automotive interior trim component 10 includes a structural portion 20--see paragraph 0022 of the specification--including a show side 22 and a back side 24--see paragraph 0019 of the specification. Claim 8 further recites a skin having a portion formed adjacent the show side and a portion formed adjacent the back side. This is illustrated in Figure 2 by the skin 28 having a portion formed adjacent the show side 22 of the structural portion 20, and a portion formed adjacent the back side 24 of the structural portion 20. This is described in the specification, for example, in paragraph 0022.

As recited in claim 8, the skin includes "an attachment feature integrally molded therewith," that is "disposed proximate the back side and configured to facilitate attachment of an automotive accessory proximate the back side." This is described in paragraph 0022 of the specification, and shown in Figure 2 as attachment feature 32 integrally molded with the skin 28. The attachment feature 32 attaches the automotive accessory--i.e., the wiring harness 38 proximate the back side 24 of the structural portion 20.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claims 1-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0194542 (Springer) in view of U.S. Patent Application Publication No. 2004/0247828 (Brozenick et al.) and U.S. Patent Application Publication No. 2005/0042421 (Schwarzwalder et al.).

VII. ARGUMENT

- A. Claims 1-15 are patentable under 35 U.S.C. § 103(a) over Springer in view of Brozenick et al. and Schwarzwalder et al.

1. Claim 1

- a. There is no suggestion or motivation to combine the references cited by the Examiner. Therefore, *prima facie* obviousness has not been established.

Brozenick et al. is concerned with vacuum forming an article such that a thermoplastic material is drawn through perforations in a structural support. The thermoplastic material is then shaped, for example, to provide an attachment head 29 to hold the thermoplastic material to the substrate—see, e.g., paragraph 0048. The attachment head 29 is not concerned with the attachment of another object to either the substrate or the thermoplastic material; rather, it is used to attach the thermoplastic to the substrate. Similarly, Schwarzwalder et al. is concerned with a multi-layer polymeric component that uses zone molding to attach a polymeric material to a mating structure. In order to facilitate this attachment, a section molded portion 20 is disposed through an aperture 52 in the mating structure to maintain the attachment of the polymeric component to the mating structure—see, e.g.,

paragraph 0060. Again, the zone molded portion 20 is used to attach the polymeric material to the mating structure, and is not configured to attach another object either to the mating structure or the polymeric component.

In contrast to these two references, Springer is concerned with a panel having injection molded components attached thereto. The injection molded components can include doghouses and wire harness attachment components—see, e.g., paragraph 0042. These components are specifically configured to attach other objects to the panel. This is in sharp contrast to the other two references, neither of which is concerned with forming these types of attachments. The Examiner states that "both Springer and the secondary references deal with the common problem of joining resin to a substrate." (Section 4 of the 5 July Office Action). Appellant's respectfully disagree, in that Springer explicitly states that "[a] primary feature of the present invention is to provide a panel having components attached thereto, the components and panel being made from separate materials." (Paragraph 0015). Thus, the three references are concerned with solutions to disparate problems, and there is no suggestion or motivation to combine them.

In addition to the general lack of suggestion or motivation to combine the cited references, Springer specifically describes its intended uses as providing a method for placing components on a surface of a panel, and eliminating show-through of back side features onto a front surface of a panel. If the panel described in Springer is modified by combining it with Schwarzwald et al., Brozenick et al., or both, it would be rendered unsatisfactory for its intended use. For example, the polymeric components of Schwarzwald et al. and Brozenick et al. are not disposed on a surface of a mating structure, but rather,

are disposed through the mating structure, or are otherwise disposed on both sides of the mating structure.

This is counter to the intended use of the panel in Springer, which includes components on a surface of the panel. Moreover, the polymeric component in both Schwarzwald et al. and Brozenick et al. can allow a back side feature—e.g., the attachment head—to show through to the other side. Again, this is directly counter to the intended use of the panel in Springer, which specifically attempts to eliminate show-through of back side features. Thus, modifying the panel of Springer by it combining with the techniques of Schwarzwald et al. and/or Brozenick et al. would render the panel unsatisfactory for its intended use. This indicates a lack of suggestion or motivation to make the modification.

b. Claim 1 of the present application contains elements which are neither taught nor suggested by the combination of references cited by the Examiner. Therefore, *prima facie* obviousness has not been established.

Schwarzwald et al. relies on a zone molding process wherein a pre-existing polymeric component is locally heated and formed through an aperture in a mating surface. Similarly, Brozenick et al. relies on a vacuum forming process to pull a portion of a thermoplastic material through a perforation in a substrate. Neither of these references teaches or suggests a second injection molded portion formed such that at least some of it is on one side of a first portion and at least some of it is on the second side of the first portion, as specifically recited in claim 1. In addition, the zone molding process of Schwarzwald et al. and the vacuum forming process of Brozenick et al. may result in markedly different structural properties as compared to the injection molded portions

recited in claim 1. With regard to Springer, Springer describes surface attachment features, which are disposed on only one side of a panel.

In addition to the foregoing, claim 1 recites that "the second portion includ[es] an attachment feature integrally molded therewith, the attachment feature being configured to facilitate attachment of an object to be attached proximate one side of the first portion." No such limitations are taught or suggested by the combination of cited references. As discussed above, neither Schwarzwald et al. nor Brozenick et al. describe polymeric portions with attachment features integrally molded, wherein the attachment features are specifically configured for attachment of an object to be attached proximate one side of the substrate or mating surface.

As also discussed above, Springer describes a panel having injection molded components on one side only. Thus, the combination of cited references does not teach all of the limitations of claim 1. In fact, the panel described in Springer not only includes components on only one side, but is also specifically configured to eliminate show-through of back side features. Claim 1 of the present application recites a second portion having an integrally molded attachment feature, where the second portion is on both sides of a first portion. Therefore, Springer teaches away from the invention as recited in claim 1, such that the combination of references does not even suggest the limitations of claim 1.

2. Claims 2-7

Claim 1 is the base claim for claims 2-7. Each of these dependent claims contains all of the limitations of claim 1, as well as additional limitations that further distinguish it from the cited combination of references. Therefore, Appellant's submit that with regard to claims 2-7, the requirements for a showing of *prima facie* obviousness have not been met.

3. Claim 8

a. There is no suggestion or motivation to combine the references cited by the Examiner. Therefore, *prima facie* obviousness has not been established.

The arguments given above with regard to the combination of references and claim 1 apply with equal force to claim 8, and therefore, Appellant's submit that with regard to claim 8, the requirements for a showing of *prima facie* obviousness have not been met.

b. Claim 8 of the present application contains elements which are neither taught nor suggested by the combination of references cited by the Examiner. Therefore, *prima facie* obviousness has not been established.

Claim 8 recites a two-shot injection molded automotive interior trim component including a structural portion with a show side and a back side, and a skin having a portion formed adjacent the show side and a portion formed adjacent the back side. This is in contrast to, for example, the panel described in Springer, which has components attached only to one side, and is specifically configured so that the components cannot be seen on the show side of the panel. In addition, neither Schwarzwald et al. nor Brozenick et al. describe polymeric portions with attachment features integrally molded to a skin, wherein the attachment features are specifically configured for attachment of an

automotive accessory proximate a back side of a skin. Thus, the combination of cited references does not teach all of the limitations of claim 8.

4. Claims 9-15

Claim 8 is the base claim for claims 9-15. Each of these dependent claims contains all of the limitations of claim 8, as well as additional limitations that further distinguish it from the cited combination of references. Therefore, Appellant's submit that with regard to claims 9-15, the requirements for a showing of *prima facie* obviousness have not been met.

Respectfully submitted,
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Enclosure - Appendices

VIII. CLAIMS APPENDIX

1. A two-shot injection molded polymeric component, comprising:

a first injection molded portion made from a polymeric material and including first and second opposing sides; and

a second injection molded portion made from a polymeric material, and formed such that at least some of the second portion is disposed adjacent the first side of the first portion and at least some of the second portion is disposed adjacent the second side of the first portion, the second portion including an attachment feature integrally molded therewith, the attachment feature being configured to facilitate attachment of an object to be attached proximate one side of the first portion.

2. The polymeric component of claim 1, wherein the first portion includes an aperture disposed therethrough for facilitating communication between the first side and the second side, and wherein the second portion traverses the aperture, thereby allowing at least some of the second portion to be disposed adjacent the first side and at least some of the second portion to be disposed adjacent the second side.

3. The polymeric component of claim 1, wherein the first portion includes an edge adjacent the first and second sides, and wherein the second portion traverses the edge, thereby allowing at least some of the second portion to be disposed adjacent the first side and at least some of the second portion to be disposed adjacent the second side.

4. The polymeric component of claim 1, wherein the attachment feature is further configured to retain the second portion proximate

the first portion, thereby eliminating the need for a chemical bond between the first and second portions.

5. The polymeric component of claim 1, wherein the attachment feature includes an elongate member and a connection member, the elongate member being configured to wrap around a portion of the object to be attached and to cooperate with the connection member to retain the object to be attached proximate one side of the first portion.

6. The polymeric component of claim 1, wherein the attachment feature includes a clamp portion having a pair of arms, the arms being elastically flexible to facilitate receiving and retaining the object to be attached.

7. The polymeric component of claim 1, wherein the first portion is made from a polymeric material that includes a polypropylene, and the second portion is made from a polymeric material that includes a thermoplastic elastomer.

8. A two-shot injection molded automotive interior trim component, comprising:

a structural portion made from a polymeric material and including a show side and a back side opposite the show side; and

a skin made from a polymeric material, a portion of the skin being formed adjacent the show side and a portion of the skin being formed adjacent the back side, the skin including an attachment feature integrally molded therewith, the attachment feature being disposed proximate the back

side and configured to facilitate attachment of an automotive accessory proximate the back side.

9. The trim component of claim 8, wherein the structural portion includes an aperture disposed therethrough for facilitating communication between the show side and the back side, and wherein the skin traverses the aperture, thereby allowing a portion of the skin to be disposed adjacent the show side and a portion of the skin to be disposed adjacent the back side.

10. The trim component of claim 8, wherein the structural portion includes an edge adjacent the show side and the back side, and wherein the skin traverses the edge, thereby allowing a portion of the skin to be disposed adjacent the show side and a portion of the skin to be disposed adjacent the back side.

11. The trim component of claim 8, wherein the attachment feature is further configured to retain the skin proximate the structural portion, thereby eliminating the need for a chemical bond between the skin and the structural portion.

12. The trim component of claim 8, wherein the attachment feature includes an elongate member and a connection member, the elongate member being configured to wrap around a portion of the automotive accessory and to cooperate with the connection member to retain the automotive accessory proximate the back side of the structural portion.

13. The trim component of claim 8, wherein the attachment feature includes a clamp portion having a pair of arms, the arms being elastically flexible to facilitate receiving and retaining the automotive accessory.

14. The trim component of claim 8, wherein the attachment feature is configured to facilitate attachment of at least one of a wiring harness, an audio speaker, a noise absorption pad, and a bolster proximate the back side.

15. The trim component of claim 8, wherein the attachment feature includes a clip configured to cooperate with an aperture in the automotive accessory for retaining the automotive accessory proximate the back side.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None